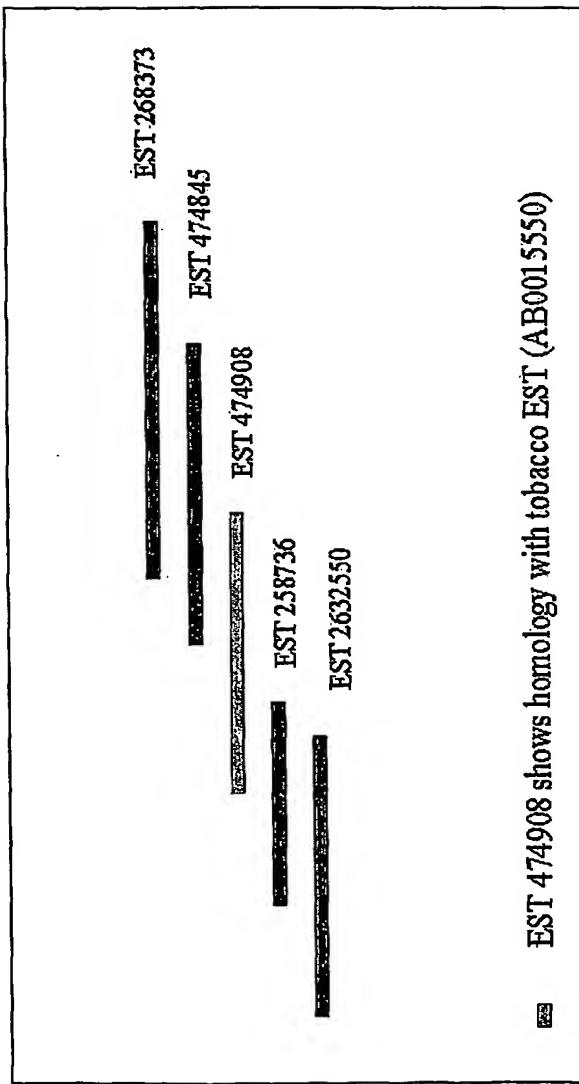


**Figure 1**

	Total protein mg	Enzyme activity nkat	Yield %	Specific activity nkat mg <sup>-1</sup>	Purification -fold
Crude extract	1716	51		0.03	
Ammonium sulphate precipitation (30-80%)	890	155	300	0.17	6
DEAE column	10.7	50	98	4.69	158
MonoQ column 60%	1.8	18.6	36	10.23	344
MonoQ column 30%	0.96	6.6	12	6.87	231
Phenylsucrose	0.07	1.2	2.4	18.03	600

nkcat = 1nmol caffeoyl-CoA s<sup>-1</sup>

**Figure 2**



**Figure 3**

**1** 60  
 toHQ **MGSEKMMKIL** **IKESTLVKPS** **KPTPTKELWS** **SWLDLIVGRI** **HLLTVYFUKI** **WGSSEFFESR**  
 tomHQ **MGSEKMMKIL** **IKESTLVKPS** **KPTPTKELWS** **SWLDLIVGRI** **HLLTVYFUKI** **WGSSEFFESR**  
 cons **-----MK-- IK--L-KPS -PTP---L-- SNLD-I-G-- -----FYK-----S-**

**61** 120  
**IMREALSMWL VSFYPM&GRL APDEQGRIEI MCNGECVLFV EAEISI<sup>S</sup>EFDI FGDFTPSLEL**  
**WIREALSMWL VSFYPM&GRL GDEDEGRIEW MCNGECVLFV EAEISI<sup>S</sup>EFDI FGDFTPSLEL**  
**--K--LS--L V--YP-BGRL -R--G--KI -CN-EG--FV EA-SD---D F-D--P---L**

**121** 180  
**RFLIBDVDTG CDISTFPLII FOVTREKGCGG WSLLGGCVFHT LSDGLSSIHIF INTUGDIAHC**  
**RFLIBDVDTG CDISTFPLII FOVTREKGCGG WSLLGGCVFHT LSDGLSSIHIF INTUGDIAHC**  
**--L-P-V--S. ---T-PL-- -QVT-EKGCGG ---G--V-H- --DG-S---F IN-W--ARG**

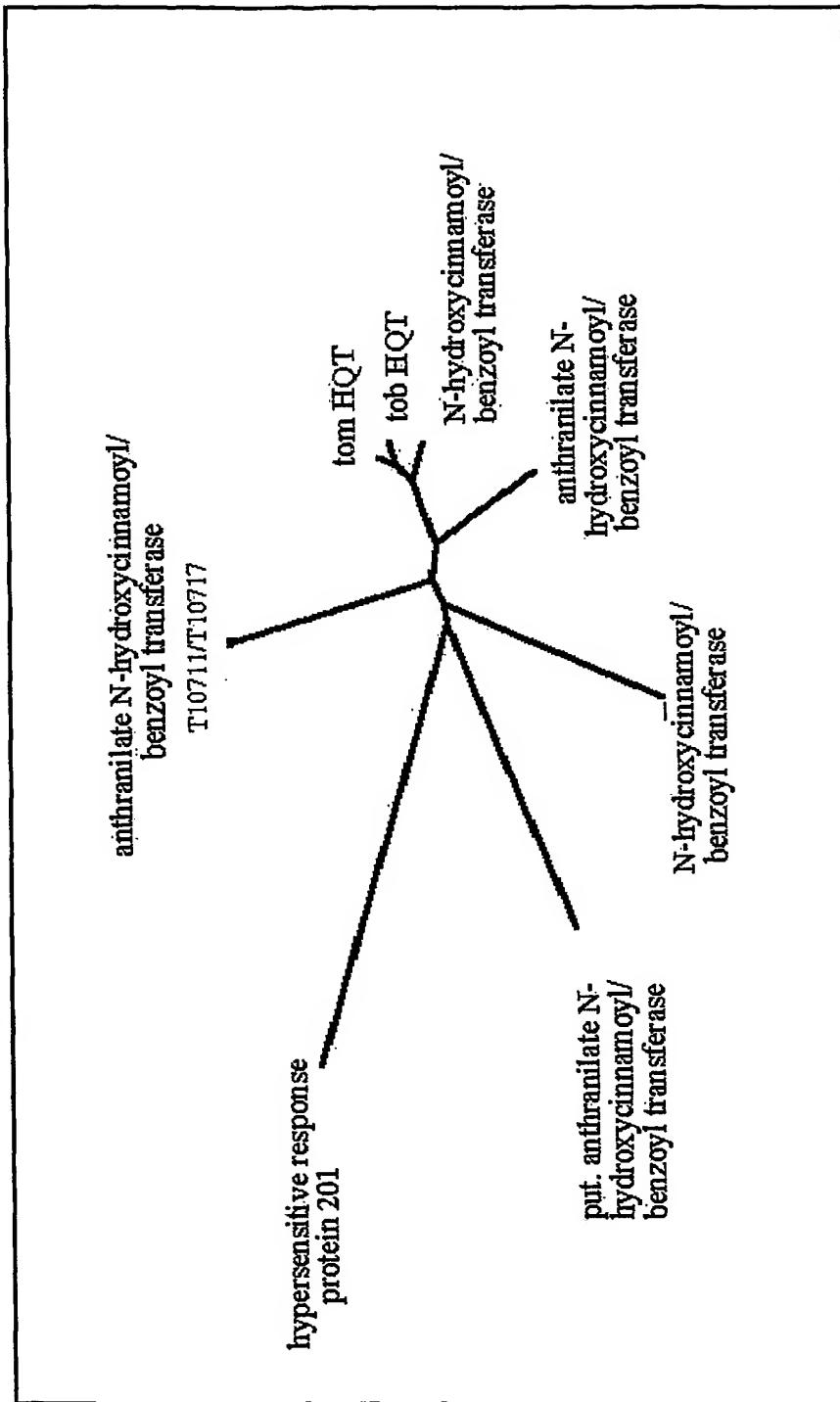
**181** 240  
**LSEVAIPPFID RTLLPAPDPF T<sup>S</sup>FEHWEYH PPP<sup>S</sup>LISSSK SIEGSTSPKPS TTTHMLKFSSD**  
**LSEVAIPPFID RTLLPAPDPF T<sup>S</sup>FEHWEYH PPP<sup>S</sup>LISSSK SIEGSTSPKPS TTTHMLKFSSD**  
**-----P--D R-LL--R-PP -----H-KY- P----- -----K-S--**

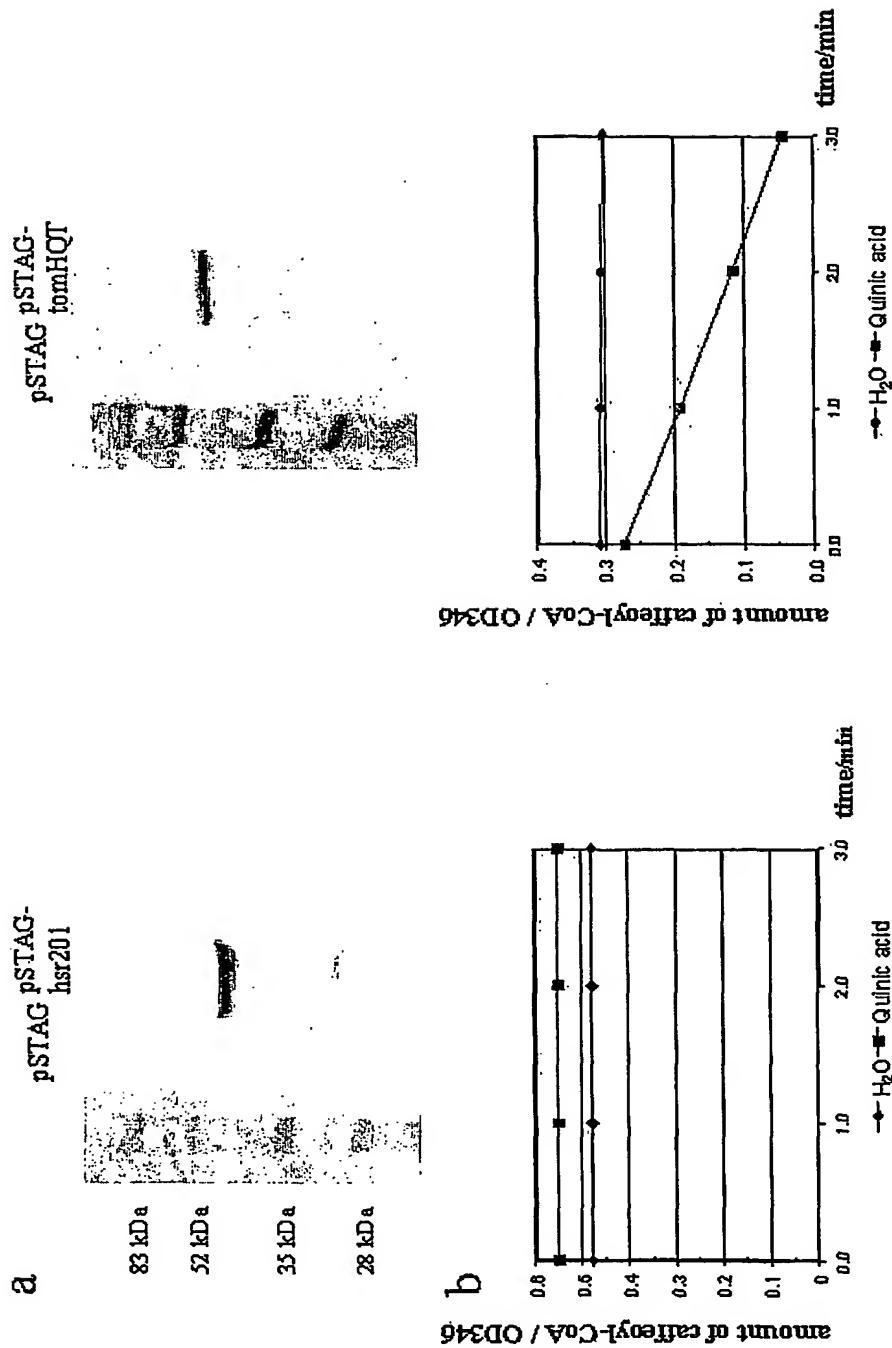
**241** 300  
**QLCLLKSEKSE EDGSTYEILM AHIWRCCTCKA FALSDDQLTK LHVATDGESK LCPLLPPGYL**  
**QLCLLKSEKSE EDGSTYEILM AHIWRCCTCKA FALSDDQLTK LHVATDGESK LCPLLPPGYL**  
**-L--LK-K- -----E-- R--WRC--KA --L----- L--R--RSR L-PPPLP-GY-**

**301** 360  
**GWVVFCTPM AFSELLEF LTWS<sup>S</sup>KRTHS ELSEHDDNKL RGAUDYLEL<sup>S</sup> PDL<sup>S</sup>LIRGP**  
**GWVVFCTPM AFSELLEF LTWS<sup>S</sup>KRTHS ELSEHDDNKL RGAUDYLEL<sup>S</sup> PDL<sup>S</sup>LIRGP**  
**GN-V----- KL--P L--R----- R-K---YL RS--D--E-- --L-----G-**

**361** 420  
**TYFASPNLNI NSWTRLPVHD SDFGWGPPIH MGPACILYEG TVYIIPSPMS KDRMLPLAVC**  
**TYFASPNLNI NSWTRLPVHD SDFGWGPPIH MGPACILYEG TVYIIPSPMS KDRMLPLAVC**  
**----- SW-R-P ----- DEFGWG-P ----- GP ----- PS ----- D ----- VC**

**421** 436  
**LDEASHJELF E KYLYEE**  
**LDOGHJSMEB E KYLYEE**  
**L----M--EE K-----**

**Figure 4**

**Figure 5**

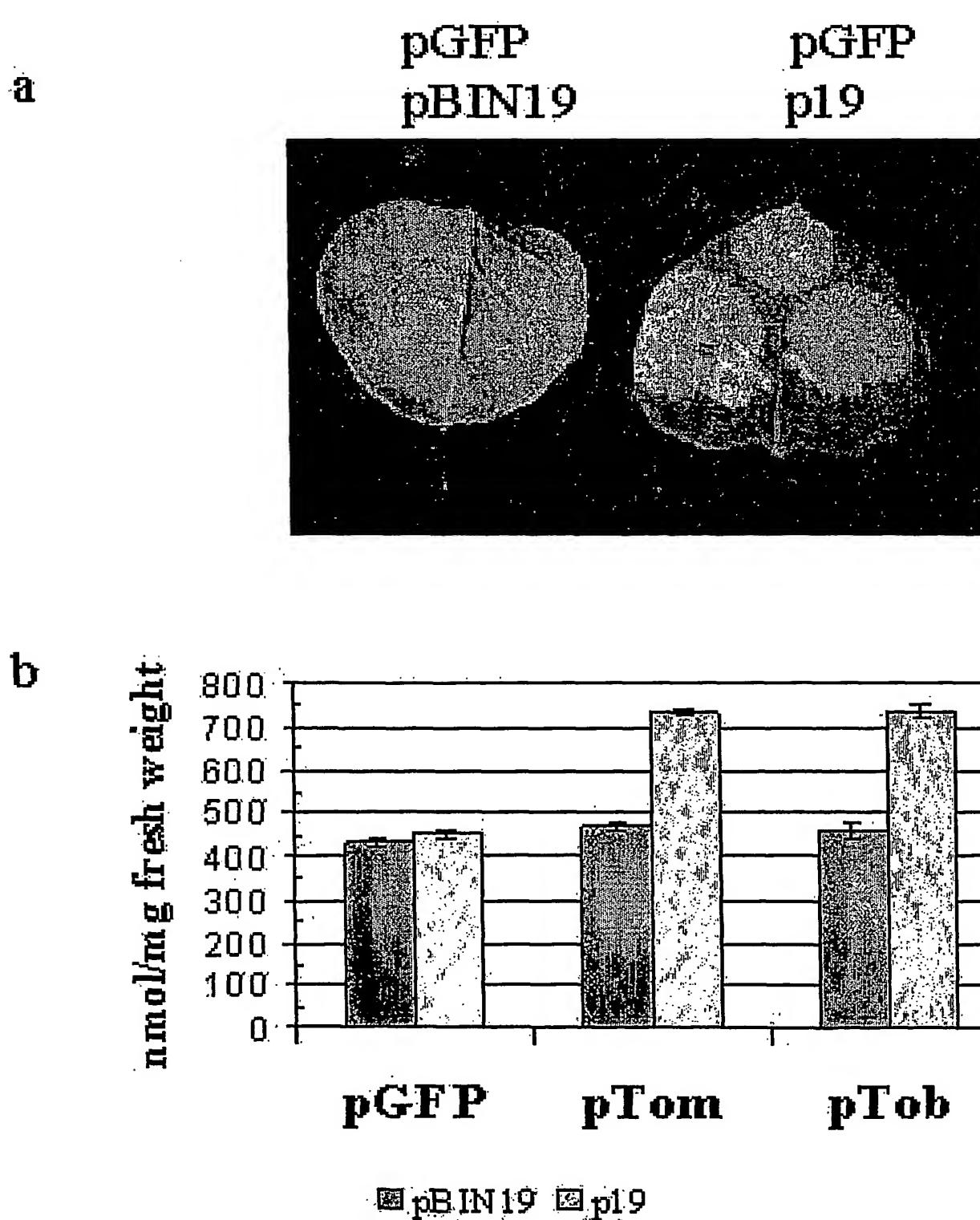
**Figure 6**

Figure 7a

ATG GGAAGTGAAA AAATGATGAA AATTAATATC AAAGAACCAA  
CACTAGTGAA ACCATCAAAA CCAACACCAA CAAAGAGAAT TTGGAGTTCT  
AATTTGGATT TAATTGTTGG AAGAATTCCAT CTTTGACTG TTTATTTTA  
TAAACCAAAT GGATCTTCAA ATTTTTTGA TAATAAAGTT ATTAAAGAAG  
CATTAAGTAA TGTTTAGTT TCATTTTATC CAATGGCTGG AAGATTAGGT  
AGGGATGAAC AAGGTAGAAT TGAAGTTAAT TGTAATGGTG AAGGTGTTT  
GTTTGTGAG GCTGAAAGTG ATTCATGTGT TGATGATTTT GGTGATTTA  
CACCATCTT GGAACCTAGA AAACTCATTCA CAAAGTGTGA AACCTCTGGA  
GATATCTCAA CTTTCCCAC TGTATATT CAGATTACTC GTTTCAAGTG  
TGGCGGAGTC GCTCTTGGTG GTGGAGTATT CCACACGTTA TCCGATGGTC  
TCTCATCCAT CCACTTCATC AACACGTGGT CGGACATCGC CCGTGGCCTC  
TCCGTCGCAG TCCCGCCGTT CATCGATCGG ACGCTCCTCC GTGCAAGGGA  
CCCACCGACA TATTCTTCG AGCACGTTGA GTACCATCCT CCACCTACCC  
TAAACTCATC GAAAAATcGC GAGTCCAGTA CCACGACCAC GTTGAAATTc  
TCGAGTGAAC AACTCGGGCT TcTTAAGTCC AAGTCCAAAA ATGAGGGTAG  
CACCTATGAA ATCCTCGCAG CCCATATTG GCGATGCACG TGCAAGGCAC  
GTGGATTGCC AGAGGATCAA TTGACCAAAT TACACGTGGC CACCGACGGA  
AGGTCAAGGC TTTGCCCTCC CTTGCCACCG GGTTACCTAG GAAACGTCGT  
GTTCACGGCA ACCCAATAG CTAAATCATG CGAACTTCAA TCAGAGCCGT  
TGACAAATTc CGTCAAGAGA ATTACACAACG AGTTGATCAA AATGGACGAC  
AATTACCTAA GATCAGCACT GGATTACCTC GAATTACAAC CTGATTATC  
AACCCCTAATT CGGGGCCCGG CTTACTTTGC TAGCCCTAAC CTCAATATTA  
ATAGTTGGAC TAGGTTGCCT GTCCATGAGT GTGATTTGG ATGGGGTAGG  
CCACATTCA TGGGACCAGC TTGCATTTA TATGAAGGGA CaATTATAT  
TATACCAAGT CCAAATTCTA AAGATAGGAA CTTGCGTTG GCTGTTGTc  
TAGATGCTGG TCACATGTCA CTATTTGAAA AATATTTATA TGAATTATGA

**Figure 7b**

ATGGGAAG TGAAAAAATG ATGAAAATTA ATATCAAGGA ATCAACATTA  
GTAaaaACCAT CAAAACCAAC ACCAACAAAA AGACTTTGGA GTTCTAACTT  
AGATTAAATA GTGGGAAGAA TTCATCTTT AACAGTATAT TTCTATAAAAC  
CAAATGGATC TTCAAATTTC TTTGATTCAA AAATAATGAA AGAAGCATT  
AGTAATGTTTC TTGTTTCATT TTACCCAATG GCTGGAAGAT TAGCTAGAGA  
TGAACAAGGA AGAATTGAGA TAAATTGTAA TGGAGAAGGA GTTTTATTG  
TTGAAGCTGA AAGTGATGCT TTTGTTGATG ATTTTGGTGA TTTTACTCCA  
AGTTTGGAAC TTAGGAAACT TATTCCACT GTTGACACTT CTGGTGATAT  
TTCTACTTTTC CCCCTCATCA TCTTCAGGT TACTCGTTTC AAATGTGGTG  
GAGTTTCACT TGGTGGAGGA GTATTCCACA CTTTATCAGA TGGTCTCTCA  
TCAATTCACT TCATCAACAC ATGGTCCGAT ATAGCCGAG GCCTCTCCGT  
CGCCATCCCC CGTTCATCG ACCGGACCCCT CCTCCGTGCA CGGGACCCAC  
CAACATCGTC TTTGAGCAC GTCGAGTATC ATCCTCCTCC ATCTCTAATT  
TCATCATCAA AAAGCTTAGA ATCCACTAGC CCAAAGCCTA GTACCACAAC  
CATGTTAAA TTCTCTAGTG ACCAACTTGG GCTTCTAAAG TCCAAGTCCA  
AACATGATGG TAGCACTTAC GAAATCCTCG CGGCCCATAT TTGGCGTTGC  
ACGTGCAAGG CACGTGCACT GTCCGACGAT CAATTGACCA AATTACATGT  
GGCCACTGAT GGTAGGTCTA GGCTTGCCC TCCTTGCCA CCAGGTTACT  
TAGGAAATGT TGTGTTACA GGCACACCTA TGGCAAAATC AAGTGAACCTT  
TTACAAGAAC CATTGACAAA TTCAGCCAAG AGAATTCTATA GTGCATTATC  
AAAAATGGAT GaCAATTaCC TAAGATCAGC TCTCGATTAC CTCGAATTAC  
TGCCCGATTT ATCGGCTTTA ATCCGTGGAC CGACGTACTT TGCTAGCCCT  
AATCTTAATA TTAATAGTTG GACTAGATTG CCTGTTCATG ATTCAAGATTT  
TGGATGGGGA AGGCCAATTG ATATGGGACC AGCTTGCATT TTATATGAAG  
GGACAGTTA TATATTGCCA AGTCCaATA GTAAAGATAG GAACTTGCCT  
TTGGCTGTTT GTTTAGATGC TGATCACATG CCaCTATTG AGAAGtATTT

GTATGAATT TGAGAGGTTG AAAAAAAAT CAAGAATGTT CCAACaCTTG  
AGAATTATcT TAGGTGTGGG TGGTTTGGA TTAAGGCATT TTGTAACTTG  
TTTCTATTG TTTTTTGGG GGGTCAGTTT GTTTCAAAA AAAAAAAA  
AAAAAAA